



# FLIRT AKKU 2-CAR UNIT

DB Regio, Pfalznetz, Germany

The FLIRT Akku is the battery-operated version of the FLIRT series.

In late 2021, the association ZÖPNV Süd commissioned Deutsche Bahn with the acquisition of 44 two-car FLIRT Akku units. The battery-operated trains will gradually be introduced on the Palatinate network from 2026 onwards. Designed for non-electrified and partially electrified sections, the FLIRT Akku is particularly versatile. The batteries can be charged both while the train is travelling with a connection to an overhead contact line, as well as at electrified terminal stations. The braking energy is also fed back into the batteries. This allows the train to be used in a manner that is both efficient and saves energy. The trains, which are equipped with lithium-ion batteries, will operate on the Palatinate network and consist of two cars with extra-long car bodies. The fully air-conditioned FLIRT Akku for Deutsche Bahn offers bright passenger compartments with a passenger WLAN system, as well as spacious multipurpose areas. There is space for a total of 325 passengers, including 172 seated passengers.

## **Stadler Deutschland GmbH**

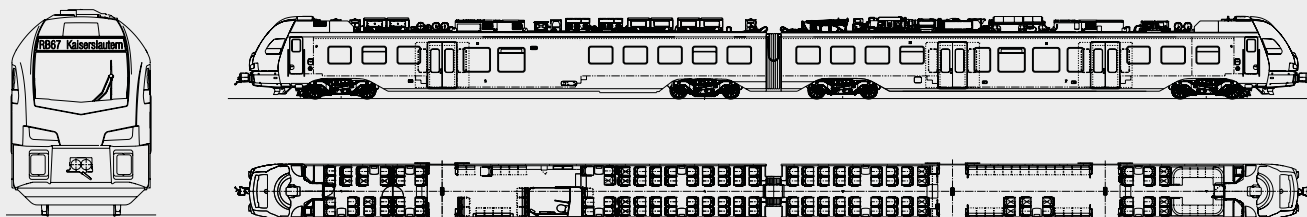
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## Technical features

### Technology

- Automatic central buffer coupler
- Lightweight aluminium construction
- Smooth running thanks to air-suspended running gear
- Overhead line with 15 kV as well as overhead line-free operation with lithium-ion traction battery
- Fast charging of the lithium-ion traction battery via 15 kV overhead line

### Comfort

- Bright, pleasant passenger compartment
- Air-conditioned passenger compartment and driver's cab
- Generously proportioned multifunctional zone at all entrance areas
- 3 passenger doors on each side
- Sliding steps at all doors
- Bicycle parking spaces/wheelchair areas
- State-of-the-art passenger information system
- Universal WC in accordance with TSI PRM
- WLAN

### Personnel

- Ergonomically designed driver's cab

### Reliability / Availability / Maintainability / Safety

- Complies with crash standard EN 15227
- Complies with the requirements of TSI PRM and TSI Noise

## Vehicle data

|                                       |   |
|---------------------------------------|---|
| <b>Designation</b>                    | FLIRT Akku BEMU 2-4/8   |
| <b>Customer</b>                       | DB Regio  |
| <b>Region</b>                         | Saarbrücken – Pirmasens – Karlsruhe, Pirmasens – Kaiserslautern – Lauterecken Grumbach, Karlsruhe – Neustadt (Weinstr.) – Kaiserslautern – Kusel, Winden – Bad Bergzabern |
| <b>Track gauge</b>                    | 1,435 mm  |
| <b>Supply voltage</b>                 | 15 kV/16.7 Hz   |
| <b>Axle arrangement</b>               | Bo´Bo´2´2´  |
| <b>Number of vehicles</b>             | 44  |
| <b>Seats</b>                          | 172   |
| <b>Standing capacity (4 pers./m²)</b> | 153   |
| <b>Floor height</b>                   | Low-floor area 600 mm<br>High-floor area 1,145 mm   |
| <b>Door width</b>                     | 1,300 mm  |
| <b>Access height</b>                  | 600 mm  |
| <b>Passage height</b>                 | 2,100 mm  |
| <b>Length over coupler</b>            | 55,500 mm   |
| <b>Vehicle width</b>                  | 2,820 mm  |
| <b>Vehicle height</b>                 | 4,275 mm  |
| <b>Bogie wheelbase</b>                | 2,700 mm  |
| <b>Driving wheel diameter</b>         | 870 mm (new)  |
| <b>Carrying wheel diameter</b>        | 870 mm (new)  |
| <b>Maximum speed</b>                  | 140 km/h  |
| <b>Drive</b>                          | 4 x 330 kW  |